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THE BOSTON Medical and Surgical JOURNAL

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PATHOLOGY.

PROTEIN SENSITIZATION IN ECZEMA OF ADULTS.

FOSS, H., AND FROLIN, J. E. (*Jour. A. M. A.*, Oct. 2, 1920) draw the following conclusions from their work:

It seems difficult to draw definite conclusions at present regarding the true value of the protein skin tests in eczema of adults. Most of the published reports with which we are familiar have dealt with eczema of infants and children.

In his experiments in eczema of adults, White used four types of foods that were not pure proteins. He performed the tests by the cutaneous method and ultimately concluded that the commercial proteins (which we used) were unreliable. Strickler in his work used a limited number of proteins and tested his patients by intracutaneous injections of solutions of proteins.

In our work (similar to that of Ramirez) we have tested each patient by the cutaneous method with a goodly number of the ordinary commercial proteins. The results of these different methods have varied greatly, and we feel that a good deal of investigation remains to be done to determine the real value of the tests. It would appear to us that they will ultimately prove to be of therapeutic assistance in a small proportion of cases of eczema of adults.

[E. H. R.]

THE COMPLEMENT FIXATION REACTION IN TUBERCULOSIS.

WOLKINS, N. W., AND BOYNTON, C. W. (*Jour. A. M. A.*, Oct. 2, 1920), reporting on six thousand five hundred reactions, conclude that:

The Miller antigen is serviceable, practical and efficient for the complement fixation test in tuberculosis.

The reaction is specific for tuberculosis and, when positive, should be interpreted as indicating tuberculosis of some degree of activity. When the Wassermann and tuberculosis fixation reactions are both positive, they should be interpreted without relation to each other.

The positive fixation reaction can be interpreted as indicating tuberculosis, either active at the time or recently active. The focus may or may not be of clinical significance, which fact must be determined by other means.

The negative fixation reaction indicates either absence of infection, excessive activity of the disease, exhausting the antibody, or arrest of the disease with spontaneous disappearance of antibody no longer required. [E. H. R.]

PELVIS OF KIDNEY AS PROBABLE SOURCE FOR INFECTION OF BLOOD STREAM.

MACOUN, J. A. H. (*Jour. A. M. A.*, Jan. 10, 1920), in a preliminary report of experimental work on dogs, concludes that bacteria can pass from the kidney pelvis into the blood stream and that they may do this under conditions analogous to some of the pathological states found in man. [E. H. R.]

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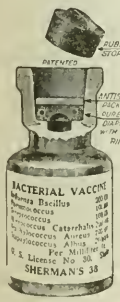

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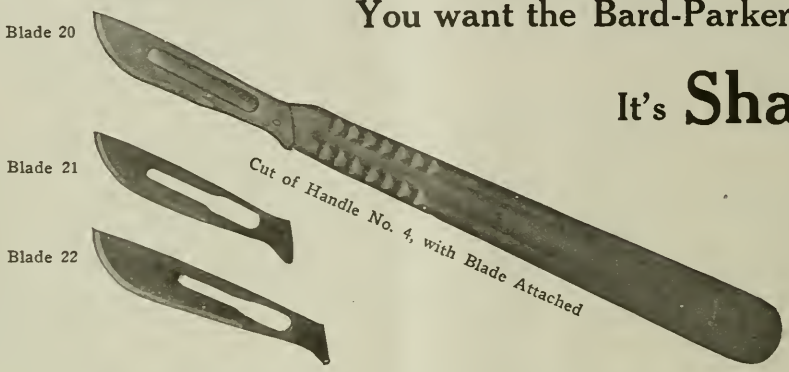

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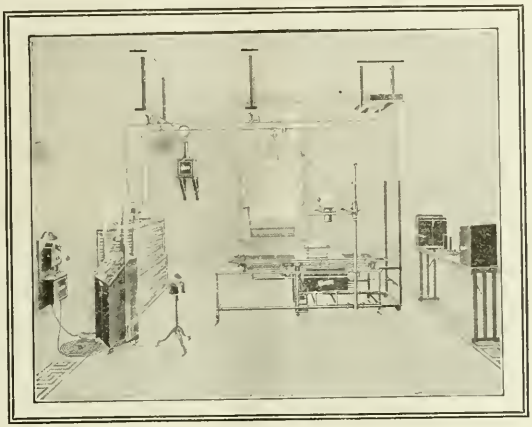

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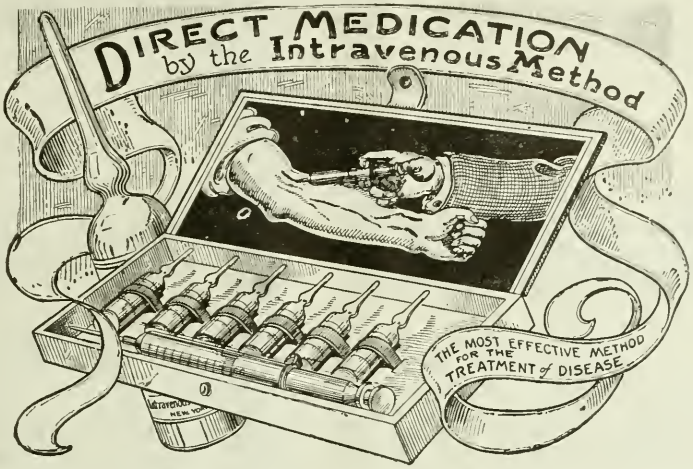

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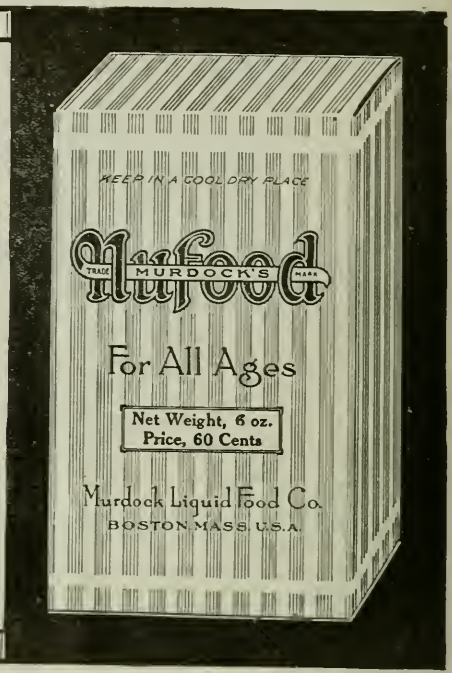

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Address

MEDICAL JOURNALS AND THE CAMPAIGN AGAINST CANCER.*

BY FRANK J. OSBORNE, NEW YORK CITY,

Executive Secretary, The American Society for the Control of Cancer.

RATHER a large order and one which should be neither adulterated nor shortweighted, the campaign against cancer is all that the name implies. It has been, and for years to come will be a battle, a fight against gross ignorance and traditional fear and hopelessness on the part of the lay public and no small skirmish against a degree of lethargy existing even in the medical profession. However, we have been told that battles are lost in the same spirit in which they are won by real fighters and we must therefore maintain a hopeful and aggressive spirit in our efforts to overcome this, one of the most difficult of all medical problems, if we hope to make any eventual headway against it. It is true that our present day methods of treatment hold out very little hope in advanced or late cases of cancer; but it is equally true, that recognition of early symptoms and immediate competent treatment justifies a most sanguine attitude and really gives hope of ultimate successful treatment of the majority of cancerous and precancerous conditions. This is the message which the American Society for the Control of Cancer has attempted to propagate during the six years it has been in existence, and those who have been in a position to observe and who have kept careful records of progress claim that results are now beginning to manifest themselves; some stating that as high as 80% of successful cures could be obtained in certain areas, if the patients would but present themselves for treatment early.

Having its birth, as this Society did, within the medical profession in response to a resolution adopted by the American Gynecological Society and endorsed by the Congress of American Physicians and Surgeons in 1913 it has enjoyed the closest coöperation from the organized medical fraternity and its official journals. From the very first it was recognized that the medical publications of the country constituted one of the most powerful agents for the dissemination of cancer control information to the profession and it is a pleasure to be able to say that this coöperation has continued and advanced during the past years. Hardly a month goes by that some cancer paper or editorial does not appear in these journals, and it is worthy

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of note that even though the paper itself may make no mention of the national campaign being waged against this disease, the discussion which follows almost invariably brings it out and stresses the point that eventual success lies in impressing upon the public the necessity of prompt and intelligent action, and upon the profession the necessity of equipping itself to render effective service in the way of diagnosis and treatment when the patient presents himself for advice. The latest evidence of coöperation between your journals and this Society was the way in which you made known to your readers the existence of the new handbook prepared especially for the medical profession setting forth the latest and most approved methods of handling this disease. The announcement which went forth in your columns resulted in innumerable requests for this booklet and has been a source of encouragement to the Society and a full recompense for the time and energy devoted to its preparation.

I should now like to be a little more explicit and attempt to indicate, with your indulgence, certain ways in which medical journals can greatly increase this valuable coöperation and be even more useful as a medium of suggestion and education to the medical profession and through it to the general public. The policy of the Society has been to have State Medical Societies appoint permanent cancer committees. During this six-year period twenty-one such societies have done so. Many of these committees, however, flourished for only a short time after their formation and have now with a few notable exceptions either become inactive or have ceased to exist. In urging the appointment of these committees the Society has always stressed *permanency in office* because of the fact that cancer is a disease which is constantly present in the population and one against which only continued efforts of education can make any impress. It is therefore felt that such committees should be composed of a few carefully selected men upon whom should be placed the duty of organizing and carrying out a thoroughgoing and persistent system of attack which could not be so well done if the personnel of these committees was constantly changing. Having gone this far, however, the Society is, by the very nature of the case, compelled to stop. These special cancer committees appointed, in most cases, merely at the suggestion of the Society, are not of it, and not subject to outside dictation or even suggestion. But it is self-evident that the editors of medical journals are in a position to greatly assist both this Society and these committees. The readers of these journals always read with interest and due respect suggestions coming from the editorial desk. Such recommendations as might be editorially offered, would certainly receive far more consideration coming officially, than if they came from an organization such as the Cancer Society, which at best would be non-official. Medical editors by taking an active interest in the organization of such cancer committees, could largely shape the make-up of such bodies. It would be simple to show why such committees should be permanent as to tenure and composed of men carefully selected for their prominence, interest, energy and sanity. The appointment of such cancer committees is a matter of no small moment, and if the efforts of the members are to result in anything worth while in the cancer control campaign, they should be most judiciously chosen. The whole success of such a movement often depends upon the character of the appointees on such committees.

Having shown your subscribers the way to organize such committess may I invite you to go one step further? It is a well known fact and one which simple observation in almost any direction will verify, that many committees, even though well chosen and organized, drop off into a state of coma or actually die of inanition. As a rule such committeemen, to be really useful, are busy men. They cannot be expected to devote a great deal of their valuable time to work even of this highly humanitarian nature. Medical editors might well consider themselves in the nature of executive secretaries. One of their normal functions is to stick pins into slumberers and to make first suggestions. It is often easier for any committee or organization to work a plan than to plan work. By virtue of his office the medical editor is in the best possible strategic position to sustain interest and get action. He is in the vanguard of the medical movement. He is in possession of all tried and proved methods of the public health and preventive medicine campaign. It is not new for him to outline programs of activities and with the added facility of presenting such programs in an appealing and forceful manner results would be bound to follow. In this way he would take the burden of this fundamental work off the shoulders of

the committee which would result not only in conserving their time and energy but in giving them the latest available information as to how to prosecute this particular educational campaign. It is realized that some committees are so blessed with specialized talent or led by a chairman so well equipped with organizing and campaigning ability that such service from medical editors would not be required. On the other hand it has been our experience that no matter how efficient and successful a committee may be, there will come a time when its activities will lag and its effectiveness begin to wane unless stimulated from some outside but closely coöperating and helpful agency.

While not assuming to have perfected any such program of activities for use by medical editors, it might not be amiss at this time to suggest a few of the more obvious lines of attack in order to block out roughly the scope of work with which such a committee might properly interest itself. Its first attention should, of course, be directed to the official medical organizations in its state and in view of the fact that education of the profession should go hand in hand with that of the public, we would place equal emphasis upon both phases of the subject. In order to indicate how this may be attained, I would call attention to two activities recently carried out by cancer committees of state medical societies. In Massachusetts, by coöperating with the State Department of Health, the Medical Society secured the distribution of the new handbook for the profession entitled, "What We Know About Cancer." This is a most fundamental piece of professional education. The booklet is brief, readable, authoritative and suggestive. To have placed it in the hands of each medical man in this State is a distinct service and one which is most heartily appreciated by the Cancer Control Society, and will no doubt go far in our educational campaign. As a parallel to this educational work in the profession, the cancer committee of the Ohio State Medical Association conducted a "cancer week" throughout that state. As a preliminary to this campaign a series of meetings was held among county medical societies and academies of medicine on the subject of cancer. The state was then divided into eleven districts, each with a supervisor to manage the details of the campaign. A large number of qualified medical men were appointed as lecturers to address lay audiences and two hundred and fifty of the lecture-outline prepared by the National Society were provided in order that these lecturers might present the subject in a uniform manner. The "week" was started with a "cancer Sunday" on which the subject was briefly presented from the pulpits in the various churches, and during the ensuing seven days, the speakers addressed groups of women's clubs, welfare organizations, chambers of commerce, rotary clubs and others. These are concrete instances indicating how well such cancer committees can function when properly guided. The chairmen of these two committees are to be congratulated for their efficiency, and it is hoped that they will continue the work so well begun. Another useful suggestion would be, that each local medical organization, whether a county society or academy of medicine, be urged to devote at least one meeting each year for its own members to a discussion of cancer and hold at least one public meeting on the same subject annually.

Somewhat removed from the medical organization group but still intimately connected with it, are hospitals and dispensaries; and nursing organizations and training schools. Posters and placards on cancer should be prepared for bulletin board display in these institutions and every effort should be made through medical staffs or hospital superintendents to include cancer control in the lecture course for pupil nurses. All such schools should be supplied with special literature prepared for nurses; and nurses' associations both state and local, should be encouraged to provide speakers on the subject at their various meetings. Red Cross and all public health nurses as well as industrial nurses should be supplied with the same information through lectures and pamphlets.

Another suggestion which medical editors might bring to the attention of chairmen of cancer committees, is to interest the members in bringing the latest supplementary cancer control information to students in medical schools and colleges. Special stress should be laid upon giving due attention to instruction of students in the recognition of precancerous conditions. Our present day knowledge indicates that the best hope of preventing cancer is to inform the public of the predisposing danger signals and to educate the profession to recognize them as such. If it be true that our best hope of controlling this disease lies in acquainting the younger generation with these facts, it is equally

true that complete success implies that no medical man should enter upon the practice of his profession without a thorough knowledge of all diagnostic procedures.

Three other agencies whose major interest is strictly professional are public health associations, health centers, and industrial physicians and surgeons. All these groups are doing most valuable preventive medicine work. Each is brought in intimate contact with numberless people who require instruction and no cancer committee can do a thorough job of professional education on the subject of cancer without enlisting the coöperation of these groups.

After having completed this part of the program which has to do specially with work through professional or quasi-professional bodies (or rather while keeping step with this part of the program as was done in Ohio), the committee should include in its activities further educational work with groups of lay or non-professional organizations. A suggestive campaign of this nature has just been completed by the Colorado State Committee for the Control of Cancer. During the last few weeks of 1919 the committee's lecturers delivered twenty-two talks on the subject of cancer control which were heard by about 4,000 individuals. Aside from one before the State Medical Society and another to hospital nurses, the following audiences were addressed, which shows the diversity of the public reached: The State Federation of Women's Clubs, employees of five department stores, employees of three industrial concerns (one a group of 1300 miners), the State Educational Association, State Librarians' Association, and State Congress of Social Workers; a Ladies' Aid Society, one church congregation, and a Parents' Association in a high school. This indicates the types of audiences which may be addressed to advantage upon this subject and when we add to them, chambers of commerce, manufacturers' and merchants' associations, trades councils and unions, ministerial and other clerical groups, fraternal orders, Y. M. and Y. W. C. A.'s, civic and study clubs, all of which have been used from time to time as mediums through which to disseminate the hopeful message of cancer control, we begin to grasp something of the immensity of the work before us and to appreciate that the word "campaign" is most aptly chosen.

I have left for the last, the consideration of one of the most important, if not the most important, and useful of all coöperating agencies through which such a cancer committee can operate. I refer to the public health departments, state and local. Having been a health officer myself, I am cognizant of the misunderstandings which sometimes exist between the organized profession and these official departments. This is not the place nor the time to even sketch the underlying causes of this unfortunate situation. It is enough at this time to state that in the fight against cancer, the state medical societies and state and local boards of health should work together as a unit. With the prestige and funds which well organized and well supported health departments can command, no chance for coöperating with them should be lost. Through their regular publications, exhibit and lecture bureaus as well as through their nursing staffs, demonstration clinics, health centers, etc., a unique opportunity is offered for the most effective kind of team work. It is not difficult to show to boards of health the desirability of such coöperation when the possibility of cutting down the death rate from this disease through intensive educational methods is properly presented.

One last word, and that, one in which I am sure the editors of medical journals will entirely concur. In making suggestions for carrying out a program of activities, particular stress should be laid upon the desirability of free use of printer's ink. After all, it is the general public that the majority of meetings are designed to reach. Success in the control of this disease can be said to be in direct proportion to the number of persons who have been persuaded by the dissemination of information to give immediate attention to suspicious symptoms. The medical man is the one who must prepare and deliver the facts, for only he has them. He should then be assured the widest possible hearing and his audience can be increased manyfold by a well organized and smooth working bureau which will see that his address is digested and reprinted in the public press. Where one hears the lecture, hundreds read the papers. If the information is valuable for people to hear, it is equally valuable for others to read. A sub-committee on publicity is therefore most essential.

I will now leave this matter for your consideration, feeling sure from the experience of the Society in the past, that this additional assistance on the part of medical editors will strengthen the bond of coöperation existing be-

tween your association and that which I represent. As an example, I may cite the splendid results of propaganda publications prepared and distributed for popular use by the American Medical Association, some of them in coöperation with our Society. I appreciate that for medical editors to take up this work means a new line of endeavor, and I recognize the difficulty of taking the first step in a new venture. However, I can assure you that if entered into with the spirit which the importance of the service merits, there is no one thing which medical journals could undertake which would so far advance the campaign for the control of this disease. You may feel sure that the American Society for the Control of Cancer is most anxious to assist in any way in which it may be privileged to do so.

New England Surgical Society

FOREIGN BODIES AS A CAUSE OF APPENDICITIS.

By S. A. Mahoney, M.D., Holyoke, Mass.

Illustrative of the above heading is a case which occurred during my term of service at the Holyoke City Hospital during the present year.

CASE WITH SPECIMEN.

N. B. Age, 4 years. Sent into the hospital by Dr. E. P. Bagg. Parents of child sent him to a clinic held at a municipal milk station in consequence of abdominal pains, paroxysmal in character and occasional vomiting. The patient walked into the clinic, and afterwards into the hospital. The examination by Dr. Bagg disclosed a very tender tumor, low down on the right side. A diagnosis of acute appendicitis was made, and immediate operation advised. On entrance to hospital, patient sat chewing gum while arrangements were made for his entrance, and walked to the ward without any apparent pain. When seen by me at 9 P.M., he was soundly asleep and with difficulty aroused, except by palpating his abdomen. He was acutely sensitive to touch over the entire right side, especially marked over the site of the appendix. A tumor about the size of an ordinary hen's egg was easily palpable, a little lower down and closer to the pelvic bones than McBurney's point. In consequence of the normal temperature, 110 pulse, 20 respiration, and the evident comfort of the child when left alone, it was decided to operate the next morning. However, Dr. Bagg, happening into the hospital just after my examination, regarded the case as so acute, that he advised an immediate operation. Accordingly a midnight operation was performed. The opening of the abdomen disclosed a clean peritoneal cavity. Hanging over the pectineal line, dipping into the true pelvis and very adherent to the neighboring pelvic bone and small intestines, was an egg-shaped tumor, brawny red in color, looking in shape and size like an infant's heart, with the base attached to the cecum. This base was so broad that it encroached on the ileo-cecal junction, so that considerable care had to be exercised in dissecting it free from the ileum. Much difficulty was encountered in freeing it from the pelvic bones and coils of adherent small intestines. A No. 2 iodized cat gut ligature was thrown about lumen of appendix, when I had cut through the inflammatory tissue, the omentum was stitched in such a manner that it covered the raw surfaces, and the abdomen was closed without drainage. The child made practically an uninterrupted recovery and was discharged from the hospital 3½ weeks after entrance.

The presence of the pin in the lumen of the appendix was not discovered until the end of the operation, when the specimen was opened. The pin lay parallel to the long axis of the appendix with its point towards the cecum and its head lying at the tip. The shaft of the pin was surrounded by a hard fecal concretion about the size of a peanut, with the point of the pin uncovered, ready to start something at the earliest possible opportunity.

In looking over the literature, many interesting questions arise, such as the possibility of diagnosing a foreign body as the etiological factor in a given case of appendicitis. In this case, the history would be of no assistanee, as the closest questioning failed to elicit even a suspicion that the boy had ever swallowed a pin.

The following group of symptoms, however, might suggest such an etiological factor; lack of temperature, colicky intestinal pains, occasional vomiting, apparent well being in the intervals, no loss of flesh, regular bowels, duration of disturbance which was about a month, and then the physical examination disclosing a tender tumor fairly well fixed in the neighborhood of McBurney's point.

The duration of time that the pin was in the appendix, is also open to conjecture. From the thick walls of the specimen, it certainly must have been there for a very long time, evidently from the creeping period of the boy's existence, which would be about three years.

Relative to the literature on this subject I find, that pins are by far the most common of the foreign bodies found in the appendix. Out of a list of 74 cases of true foreign bodies I find that pins occur in 40 of them. The other foreign bodies found are:

Fruit seeds	7	Stone	1
Shot	3	Solder	1
Iron filings	3	Barley grain	1
Beans	2	Gall stones	1
Piece of bone	2	Worms	1
Calcareous matter.	2	Chocolate nut	1
Clove	1	Bristle	1
Oat hulls	1	Die (parchesi)	1
Date seed	1		—
Piece of wood	1	Total	34
Berry seeds	1	Pins	40
Cherry stones	1		—
Raw chestnut	1	TOTAL	74

Thus the pins compose 55.5% of all cases of true foreign bodies found in the literature.

It would naturally be supposed that pins would be found mostly in the appendices of women. This, however, is not the case, for most of the pin cases occur in men. Authori-

ties differ as to the frequency of occurrence:

No. 53. DeForest states that pins are four times as common in males as females.

No. 51. Mitchell states that the men are twice as susceptible to swallowing pins as women, his cases being males, 17; females, 9.

In looking over the literature I find that the cases stood: Males, 25; females, 14. This is more in accordance with No. 51—Mitchell's conclusions.

According to No. 42—H. A. Kelly—only two cases occurred in seamstresses.

The majority of pin cases occur in younger children. The cases in the literature show that out of the 40 cases 16 were under 10 years of age. No. 51 Mitchell reports a pin in a baby of 15 months.

The earliest probable case is that described by Ruysch in 1691 (No. 51 Mitchell).

The first absolutely authentic case of a pin in the appendix is that of Dr. Mestivier of Bordeaux in 1757 (No. 51 Mitchell).

Authorities differ as to the total number of cases of foreign bodies in the appendix known to date.

No. 53. DeForest states, "Since 1759 only 30 cases of true foreign bodies in the appendix have been reported—a pin was the most frequent."

In my survey of the available literature I find 70 cases of what I considered true foreign bodies in the appendix.

The following table taken from *Bernard et Vignard* No. 8, gives a total of 86 cases.

Foreign Bodies Known as Cause of Appendicitis.

	Cases
Before 1880	25
1880 to 1895	19
1895 to 1910	42
Total	86

Murphy reports foreign bodies in 3.5% of cases

Fitz (1886) reports foreign bodies in 12% of cases.

No. 51, J. F. Mitchell reports 7% foreign bodies in 1400 cases.

Fowler had only three foreign bodies present in 2,000 cases.

DeForest, No. 53, encountered no foreign bodies in several thousand cases.

In speaking of foreign bodies as the exciting cause of appendicitis J. B. Deaver, No. 23, makes the statement that "they are very rare as an exciting cause."

Osler & McCrae, No. 57, draw practically the same conclusion as does Dr. Deaver, No. 23.

On the other hand, the following list quoted from Bernard & Vignard, No. 8, gives the results of foreign observers:

	Cases	Cases of Foreign Bodies
Talamon	760	60-100
Femmek	105	55
Fuern (1895)	171	64
Guinard	200	24
Lengfeld	459	17
Rermersdi Rostegen	5557	2
Berthelier (1895)	29	7 pins

The high results obtained here seem out of of proportion with the results mentioned previously in this paper. However authorities differ as to what should be classified as a foreign body. Fecal concretions are excluded from my list. Undoubtedly several of the authorities above mentioned must have included fecal concretions among their list of foreign bodies in order to obtain such high results.

The opinions held by the various men differ in regard to the correlation between the severity of the attack and the presence of a foreign body. There is good evidence, however, that in the majority of cases, the foreign body excites a chronic inflammatory reaction, which ultimately results in an acute process or leads to abscess formation.

Kelly, No. 42, states that pins and other foreign bodies are generally a long time in the appendix before the acute process develops. Even then, the foreign body finally determines the site of perforation rather than inducing the inflammatory attack itself.

Mitchell, No. 51, makes mention that "all types of appendicitis arise from pins. Some gave rise to only mild symptoms and may lead to chronic appendicitis with recurrent attacks or long continued pain (cites 7 cases) or only a feeling of uneasiness in the right iliac region which may last for months or years and perhaps end in an abscess. Most often there is rapid perforation and abscess formation following the first symptoms."

Mitchell, No. 51, reports 28 cases of pins, of which two caused a perforation of the cecum.

In the 40 cases of pins in the literature I find the attack to be acute in 24 cases, chronic in 14; no mention was made of the severity of the attack in two. This gives a percentage of 60% acute and 35% chronic.

The mortality in these pin cases is very high. In 38 cases in which the result was mentioned there were 21 deaths to 17 recoveries, a percentage of 55.2% against 44.8% recoveries.

Before 1895 the percentage of deaths to recoveries was much greater, there being 13 deaths and only five recoveries. Deaths, 72.2%; recoveries, 27.7%.

In the period 1895-1917 the deaths were eight and recoveries 12. Deaths, 40%; recoveries, 60%.

The position of the pin in the appendix is quite interesting. With regards to this, Mitchell, No. 51, states as follows:

"The pin may enter by its head or point. It is usually straight, lying in the lumen of the appendix and perforating with its point. In one or two instances, it lay across the lumen and perforated one wall with its head, and the opposite with its point. Dr. McBurney removed an appendix, with two pins lying side by side and perforating the opposite walls of the appendix in this manner."

The condition of the pin varies according to its recentness of swallowing and is usually covered with a fecal concretion.

Mitchell, No. 51, says, "The pin may be free from deposit, rusty or corroded. It is usually the nucleus of a fecal concretion, which covers the head and most of the shaft, leaving the point free. There is frequent association of abscess of the liver (7 cases).

Abscesses were present in practically all of the cases. Only five out of the 36 cases, in which the presence or absence of pus was mentioned, had no pus.

Mitastatic abscesses were rather commonly present. There were nine abscesses of the liver out of 40 cases. This means that about one-fourth of the cases had metastatic abscesses.

One of the peculiarities of these cases is the fact that in the majority of them there was no definite history of swallowing the pin. Only three out of 40 cases had any such knowledge.

SUMMARY.

1. Pins are the most frequent of foreign bodies found in the appendix.

2. Pins occur more often in the males than in females (2-1). Occur most frequently in children under 10 years.

3. Cases comparatively rare, only 40 pins in 160 years, possibly 228 years, if case of Ruysch (1691) is considered the first case.

4. Only 86 cases of true foreign bodies, as maximum, mentioned in literature.

5. Cases of true foreign bodies range from about 0.2% to 12% among American observers. The per cent. is higher among foreign observers—as high as 50%. Probably due to the fact that these authorities classify fecal concretions as a foreign body.

6. The pin generally lies quiescent in the appendix a long time, and

7. The attack causing operation generally is acute. The mortality is exceedingly high. Pin may enter by head or point, lie transversely or parallel to axis of appendix.

8. Appendix generally perforated and with point of pin, for the pin is generally covered with deposit with point left free.

9. Abscess formation generally present and generally fatal before 1895.

10. Metastatic abscesses of liver rather commonly present.

11. Generally no history of swallowing pin.

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SOME INSTANCES OF DIVERTICULITIS OF THE SIGMOID OPENING INTO THE BLADDER.

By A. L. Chute, M.D., Boston.

One of the relatively rare conditions met in urinary surgery is that in which, due to a diverticulitis of the sigmoid, we find a communication between the sigmoid and the bladder. I have in my records accounts of four such cases, two of which I published some years ago and two of which have not been reported.

The reported cases both came under my observation in 1910 and an account of these cases was presented at the meeting of the American Association of Genito-Urinary Surgeons in 1911 *

Briefly, the first of these patients was a man of 53, whom I cystoscoped for the late Dr. M. H. Richardson in 1910 and who was operated on by him in March and again in July of that year. Following the first operation there was a period of some months of freedom from symptoms after which the condition recurred and was again operated upon. The patient developed a purulent peritonitis on the fourteenth day after operation and died within 48 hours.

* Transactions of the American Association of Genito-Urinary Surgeons, 1911, Vol. vi, p. 86.

The second case was a man of 60 that I operated upon in July, 1910. He had passed gas by urethra for eight months and bowel contents for a somewhat shorter time. This man had sugar in his urine, which disappeared under treatment. Operation showed a communication between the sigmoid and the bladder, very low in the pelvis. It was separated and the openings in the sigmoid and the bladder closed. This patient died four days after operation. Autopsy showed a collection of pus deep in the pelvis; a part of the line of suture of the sigmoid had given away.

The third case was that of a woman of 66, whom I saw in 1914. She had been constipated for years. Three weeks before I saw her she took a dose of castor oil and following active catharsis she had pain in her bladder with burning urination. She passed gas by urethra and some bowel contents. As a test she ate some figs and recovered the seeds from her urine. The cystoscope showed a small opening low down in the bladder on her left, into which a ureter catheter could be introduced 1½ inches and from which bowel contents now and then appeared. The patient was unwilling to submit to operation and died in 1915, probably of some intercurrent disease, said to be "septic poisoning and arteriosclerosis."

The last case of this sort that I saw was of especial interest and I shall report it in detail. It concerned a man of 50 whom I saw in March, 1919. He had the history of a urethritis many years before when he was between 20 and 30 years old. Twenty years before he had had an attack of jaundice, likewise another attack of the same sort five years before. He had recovered from both these attacks under no treatment other than the use of a restricted diet. He had always been constipated and had attacks of rather vague abdominal discomfort, the seat of which was the lower part of his abdomen on the left.

From about the time of his urethritis he had had times when it had been difficult for him to urinate and other times when he had suffered from frequency of urination and from discomfort referred to the region of his bladder. He had believed that this discomfort depended upon a stricture, supposedly the result of his urethritis. He had, however, never received any treatment for this condition. For three or four weeks before I saw him he had had increased frequency of urination, as often

as every half hour; also more or less difficulty in emptying his bladder, together with discomfort referred to his left iliac region. Eight days before I saw him he started on a railroad trip of about 100 miles. During the first part of the trip he had great frequency as well as difficulty and before arriving at his destination was absolutely unable to void although he had constant tenesmus and desire. On his arrival he placed himself under the care of one of the well known local medical men who sent him to a hospital. There was difficulty in catheterizing the patient and only a small amount of urine was obtained. That night the patient had a chill. For a week he remained in the hospital with an elevated temperature and rapid pulse; he had occasional chills during this time. Also he passed relatively little urine during this time. When I saw this man, a week after the onset of his attack, he had been moved to his home. His temperature ranged from 100° to 103°, his pulse rate was usually somewhat over 100. He had constant desire to void but considerable straining produced nothing but a little pus. Examination showed that the patient had a dry, brownish tongue; his prostate was negative; I could feel nothing in his loins. There was a little tenderness in the left iliac region as well as a vague resistance there. He was catheterized without difficulty and his bladder found to be empty. I supposed that this patient had a suppression of urine of unknown origin and sent him to a hospital where he was given salt solution under the skin as well as large quantities of water by mouth. Because of the story of difficult urination a retention catheter was placed in his bladder. The next morning it was found that he had passed only a very few ounces of urine. Changing the catheter I got a little puff of gas from his bladder, which also contained some very foul fluid, evidently fecal. Rectal examination with a catheter in place failed to show any opening between the bladder and rectum. The inference was that this man had had a diverticulitis of the sigmoid which, being adherent to his bladder, had given him his urinary symptoms of many years standing, that had been supposed to have depended upon a strieture of his urethra; that on the day he went out of town a rupture of the diverticulitis into the bladder had taken place. The irritation of the bladder with the bowel contents produced the frequency and tenesmus while his supposed suppression was in reality the emptying of his bladder contents into the sigmoid through the fistula.

This patient was kept under observation for several days, during which time he had occasional chills with a temperature ranging from 101 to 103 and a considerably increased pulse rate. Examination failed to find any cause to satisfactorily account for his temperature other than the possibility of a pus cavity which might exist between the sigmoid and bladder. This man's condition seemed to be getting worse, so on March 10 I did a laparotomy under spinal. I found no collection of pus in the pelvis but I did find a place deep down in the pelvis where the sigmoid was attached to the bladder rather on its left side. This communication was very short, about ¾ inch; it was separated under double clamps. The opening in the sigmoid was sewed up with two layers of catgut as was also the opening in the bladder. This was rather difficult to do, partly from the induration about the opening and partly from the depth at which it was necessary to work. A rubber wick was carried down to the point of suture. In order to prevent any pressure against the line of the bladder suture that might result from a full bladder, the bladder was opened above and a suprapubic tube was placed in position. No focus of suppuration was found and the man's temperature continued elevated and his pulse rate remained rapid. He was evidently profoundly septic though no focus was evident. He was given large amounts of salt solution under the skin. Two or three days later there appeared a bulging in the perineum with swelling of the scrotum. These were incised and considerable pus evacuated. It was evident that this man's temperature had not been due to any suppuration about the diverticulum, not to his pyelonephritis, but to this collection of pus deep in the pelvis. At the time of operation I found a place in his deep urethra which had either ulcerated from the pressure of an inlying catheter or had been perforated by the passage of a catheter; the cause without reasonable doubt of his pelvic suppuration. A considerable portion of the skin of the scrotum sloughed, leaving the testes almost wholly uncovered; during the process of healing, however, they were completely recovered. The wounds closed up slowly but closed completely in some weeks. Two or three weeks

after operation there was a discharge of feces from the abdominal incision. This fecal discharge diminished but reappeared from time to time during the three months he was in the hospital. At the time he left the hospital his urine was perfectly transparent and he was without urinary symptoms; this condition has continued. The man has been at work regularly now for more than a year. When he last telephoned me, some weeks ago, he said there was a little watery discharge from the abdominal sinus but that there had not been any fecal discharge for a good many months.

To me this case is of special interest as it gives us, I believe, a good picture of the behavior of a diverticulitis of the sigmoid, which has become attached to the bladder, at a stage which is rarely if ever recognized and which one would gather from this case, probably takes place long before there is anything like an ulceration through into the bladder. This man for 25 years had had periods of frequency and urgency, combined with difficulty in voiding. His frequency, I assume, was due to the irritation that this condition produced, while his difficulty was probably due to the fact that the mobility of the bladder was interfered with by this diverticulum which attached it to the sigmoid.

Symptoms such as these without any evidence of local disease of the bladder should, I believe, arouse our suspicions as to the possible presence of a diverticulitis of the sigmoid which has become adherent to the bladder. The presence of a constant feeling of discomfort in the left inguinal region, attended with slight tenderness would increase the probability of this condition. It seems to me perfectly possible that in such cases the use of bismuth enemata might allow us to demonstrate by radiographs the presence of a diverticulum of the sigmoid. This I have not, as yet, been able to do.

As regards the etiology of this condition, for the most part diverticula of the sigmoid appear in patients above middle life; a large amount of fat seems to predispose. It is supposed that the formation of diverticula of the sigmoid depends upon fatty infiltration of the intestinal wall, usually under some epiploic appendage and the consequent giving away of the muscular layer. Some are undoubtedly of congenital origin.

From the history of the patient, whose case I have reported in such detail, it seems evident that the condition may exist for a very long time even after the diverticulum has become attached before rupture into the bladder takes place. In this patient we have a history of years of discomfort. In some, as in the first patient described, there is a definite abscess formation which finally breaks into the bladder. In the patient whom I described in detail there was no abscess between the diverticulum and the bladder. Presumably in such cases the tip of the diverticulus adheres to the bladder and ulcerates through without the formation of an abscess cavity. In this individual there was no evidence of any abscess cavity, nothing but a little tube about the size of a slate pencil leading between the sigmoid and the bladder.

As regards the symptoms seen in this condition, the cases have presented the two striking symptoms seen in cases where there is a connection between the bowel and bladder. The first of these is the passage of gas by urethra, which may rarely be simulated by urinary infections with gas producing organisms said to be especially likely to occur in patients whose urine contains sugar. The second and absolutely pathognomonic sign is the passage of bowel contents in the urine. This, of course, is an absolutely definite sign of a connection between the intestine and the bladder but it does not necessarily mean that the connection is the result of a diverticulitis of the sigmoid. The passage of urine from the bladder to the sigmoid, rather marked in this case, varies considerably in different cases, and is hard to estimate. It has relatively little diagnostic value.

In the instances where a vesico-intestinal fistula is due to tuberculosis or malignant disease, the history as well as the cystoscopic appearance is usually sufficient to render the nature of the condition clear. There are instances, however, where one has a tremendous infiltration of the sigmoid, inflammatory in type and due to the presence of multiple diverticula, which may simulate very definitely a carcinoma.

In the instances where a vesico-intestinal fistula is due to tuberculosis or malignant disease, the history as well as the cystoscopic appearance is usually sufficient to render the nature of the condition clear. There are instances, however, where one has a tremendous infiltration of the sigmoid, inflammatory in type and due

to the presence of multiple diverticula, which may simulate very definitely a carcinoma. In the light of the case that I have reported, I hope we may be able in certain instances to make a diagnosis of diverticulitis of the sigmoid before such time as it has opened into the bladder. As I have suggested, the instances of bladder irritation without evident disease of the bladder itself, especially when combined with a certain difficulty in voiding without the presence of stricture, and without any defect in the nerve supply of the bladder should awake in our minds the possibility of a diverticulum of the sigmoid which is adherent to the bladder. It is possible that in a certain number of such cases that a radiograph after a bismuth enema will give us definite evidence of such a condition.

The treatment of the condition is purely surgical. The sinus which is usually slightly to the left of the median line and lies down in the pelvis must be found, tied off and the openings into the sigmoid and the bladder closed. Where there are multiple diverticula of the sigmoid with great thickening of the intestine or where there is an abscess between the intestine and the bladder, this closure will be attended with great difficulty; especially is it difficult if there is thickening of the intestine below the origin of the diverticulum. In all cases "adequate" abdominal drainage should be provided, and I believe the use of suprapubic bladder drainage is desirable. The attempts to treat the condition by closure of the fistula from the bladder side have been, as one would expect, without value. In the operated cases that I have seen there has been some leakage of bowel contents and I think it is probable that in few cases of this type will one be able to get a primary union after suture of the opening into the sigmoid. Most of these openings, however, where the primary suture has not held will probably close in time by granulations. In placing the drainage we should remember that we shall probably have fecal leakage.

OBSERVATIONS ON CANCER OF THE RECTUM.*

By Ernest A. Wells, M.D., Hartford, Conn.

The writer has undertaken to make a few observations on cancer of the rectum based on the records of 53 cases, for the most part treated at the Hartford Hospital in the last twenty years. His interest has been stimulated by the fact that he has personally been able to follow a few of them over a relatively long period of time. Twelve of them have come under his personal care. Being under the observation of many doctors, the records obtainable are variable. For the most part, they are very incomplete and leave much to be desired. They have been taken, however, *in seriatim*. None have intentionally been omitted.

SEX.

Of the 53 cases, the sexes are almost equally divided; 26 were males and 27 females. In the Hartwell series 26 were males and 20 females; while in the Cripps series the males outnumbered the females, two to one. In studying the subject of cancer of the rectum, one must constantly think of a possible relation between syphilis of the rectum and subsequent cancer. It has occurred to me to compare data in these 53 cases with similar data in cancer of the tongue, wondering whether it may be possible to demonstrate any similarity in cancers at the two ends of the alimentary canal. One might be led to suppose that there *would* be some similarity because there is much in common in the embryology of the two regions. But in this very first matter of sex, we find a marked difference. In 22 cases of cancer of the tongue, occurring at the Hartford Hospital and recently studied by my brother, Dr. Donald Wells, 20 cases were males and two were females. There must have been just as much syphilis in the rectum as in the mouth and as much in females as in males. These figures seem to argue, therefore, that syphilis is *not* a cause of cancer and the discrepancy in the relative number of the sexes suggests very strongly that the other factor, namely smoking, is the reason for the great preponderance of males in cancer of the tongue. It is interesting in connection with this to remind you that cancer of the tongue does not appear in the literature until about the time of the discovery of tobacco, a date which also coincides closely with the appearance of syphilis in Europe. We should also note here that *benign stricture* of the rectum is very largely confined to women (Cripps 63.7).

AGE.

The ages at which these patients entered our observation were as follows:

* Essentially this same article appeared in Surgery, Gynecology and Obstetrics for November, 1920.

TABLE OF AGES.

20-30	1
30-40	4
40-50	9
50-60	7
60-70	15
70-80	13
80-90	2
Not stated	2
	53

It is thus decidedly a disease of advanced age. Yet there appears one case at the age of 22. Dr. John Hartwell also reports one case at the age of 23, and Watson reports cases at 17, 20, 21 and 23 years of age. Cripps reports three under 20 years of age.

That a patient should suffer from cancer of the rectum at 22 seems, however, rather remarkable and perhaps suspicious. Yet the records of this case of ours are rather more complete than *most* of the series and prove to my mind beyond reasonable doubt that it really was a case of cancer of the rectum.

This girl was married, age 22, and first came under our observation August 1, 1908. She had been in the hospital a few weeks previously, and the diagnosis on this admission was ulcer of the rectum. It is recorded that she refused an operation and left against advice. The patient was re-admitted within a week or two. On this occasion the sphincter was stretched and a mass was felt just inside the sphincter bulging into the vagina. A section was removed for microscopical examination and the specimen was reported adenocarcinoma. I have verified the original record of the pathological examination of this section in the laboratory of the hospital within the last few days. Patient again left the hospital against advice.

It appears that she next went to another hospital where the growth in the rectum was removed. The result, however, was unfortunate, as she became bedridden, was unable to lie on her back, and was re-admitted to the Hartford Hospital a year and three months later in a pitiable condition and soon died. The patient lay on her face, a large indurated swelling in the sacral region, the anal orifice closed and a left iliac colostomy taking its place. The left leg was swollen and the patient emaciated.

It is interesting to note that the orthopedists were already at that early date invading the province of general surgery, for it is recorded "Orthopeditians were planning to put patient in extension on inclined plane to make her more comfortable but patient worried so much about it in her weakened condition that she died." At any rate, I think that there is no doubt but that she was a true case of cancer of the rectum.

Our second youngest patient might also come under suspicion of syphilis rather than cancer, the more so, that he is still alive and well, now fourteen years since his operation. (He died in April, 1920 of influenza.) His first symptoms appeared at the age of 31, when he noticed blood in the stools, followed later by griping pains. One year after these first symptoms, he came to me and was referred by me to Dr. P. R. Bolton, my former attending surgeon at the New York Hospital. Dr. Bolton removed a carcinoma involving an area the size of a silver dollar. A modified Krasky operation was done. The tumor was found just within the anus involving the anterior and lateral walls and was removed, leaving the sphincter to a considerable extent intact. "The specimen consisted of a portion of rectal wall 9 x 3 cm. Excepting for a narrow rim of normal gut, the wall was the seat of an oval ulcerated tumor, whose edges were fairly sharply defined. The tumor tissue was confined for the most part to the mucosa but in several places had penetrated to the muscularis. Microscopic examination showed an adenocarcinoma of a not very malignant type." The patient began to increase in weight immediately, but did not regain full control of the sphincter for more than six months. There has never been any sign of return of this cancer and yet it was removed by very conservative methods. There has never been any serious secondary stricture. I believe the explanation of *this* is that the growth did not involve the posterior wall of the rectum and probably the whole circumference of the rectum was not removed. Wherever the rectum is resected and a circular suture done, a stricture always occurs as a result and this stricture sometimes causes almost as much trouble as the original cancer. An end to end anastomosis of the intestine can be made anywhere where it is entirely surrounded by peritoneum, but as soon as we get beyond the recto-sigmoid junction and into the rectum proper where there is peritoneum on the anterior surface only, or still farther where there is no peritoneum at all, resection with circular suture cannot be done without producing a stricture. Such a stricture requires constant dilatation to main-

tain patency. At any rate this case speaks wonders for the possibility of very conservative surgery in localized cancers of the rectum.

USE OF THE CYSTOSCOPE FOR EXAMINATION OF THE RECTUM.

This raises the question as to how one is to tell whether such a cancer is localized or not. The use of the cystoscope for this purpose was suggested by my associate, Dr. T. N. Hepburn, and I have not run across any other reference to this method of studying these cancers in the literature. But acting on Dr. Hepburn's suggestion, we have used this method a few times in our service at the Hartford Hospital with great satisfaction. The patient is placed in the knee-chest position with the abdomen relaxed. The cystoscope is easily introduced, the rectum washed clear, and filled with water as in bladder examinations. If pains be taken with the washing, it is astonishing what a perfect picture of the growth can be had. And it should be possible to tell with certainty whether or no the malignant ulcer in question involves the whole circumference of the rectum or not.

CONSERVATIVE SURGERY IN CANCER OF THE RECTUM.

In the 1917 *Collected Papers of the Mayo Clinic*, Dr. Mayo describes the removal of localized papillomatous tumors of the large bowel or rectum by linear incision through the wall of the bowel by the abdominal route and removal of these tumors by conservative methods. The tumors he describes are not actually cancers but they must be at least potentially so as shown by our case No. 21, where a papillomatous tumor was removed through the anus by conservative methods by Dr. A. M. Rowley in 1914 in a patient aged 60. This tumor was regarded at the time of operation as merely a papilloma, but on study in the laboratory was found to have undergone carcinomatous degeneration. This patient left the hospital apparently well. A letter received from the daughter of this man a few weeks ago says, "He never had one sick day from that time till the summer of 1919." From that time on he began to fail. He died November 16, 1919, with symptoms suggestive of cancer of the stomach. This man had lived and been perfectly well for over five years after the removal of an adenocarcinomatous polyp by conservative surgery.

Dr. Arthur Dean Bevan in the Chicago Surgical Clinics for 1917 describes a method by which he removes the coccyx and then slits the rectum posteriorly from the anus up a distance of four inches. This gives him a splendid exposure through which he is able to remove localized carcinomata with the cautery. He then loosely closes this wound and then the wound of approach. *He* says that he has done quite a number of cases by this method during the last five or six years and he believes it is a method that should be adopted in beginning small carcinomata of the rectum without serious involvement. That, if he himself had such a condition, he would prefer this operation done thoroughly to any other. He says that he has a number of cases alive and well two, three and four years after these cautery operations in the lower bowel. It is to be noted that this operation of Dr. Bevan's is practically the same as that described by Mr. Harrison Cripps of London in his long and very remarkable series of cases

The above is about all that can be said in favor of conservative surgery on cancers of the rectum. And it is evident that before conservative surgery can be undertaken in any given case, a fairly accurate knowledge of the location and area involved should be determined.

SLOW COURSE OF CANCER OF THE RECTUM.

There is one other feature, however, to which your attention should be called and that is the *very slow course* which some cancers of the rectum seem to pursue. Such a case is illustrated in case No. 1 of my series.

This woman had had stomach trouble, constipation, and generally poor health for many years. She had had ribbon stools and difficulty in defecation for one year. It is reasonably certain, therefore, that her cancer started at least one year prior to the date of her operation or about January 1, *1903*. She was operated on by Dr. Bolton at the New York Hospital February 8, 1902, at which time he made a posterior approach, resected the rectum containing an adeno-carcinoma, did an end to end suture and established a temporary left inguinal colostomy. "This specimen was the lower 8 cm. of the rectum. A moderately indurated ulcer involved all except 1½ cm. at either end. The mucosa below the ulcer was normal, but that above was indurated, at one point right up to the line of excision. The lumen was reduced moderately, more in the upper than in the middle and lower parts. The

sections showed a typical adeno-carcinoma with slight mucoid degeneration. The ulcerated area showed invasion of the muscular coat. At one point the mucosa was involved close to the upper incision." This patient was referred to me on her return from New York (May 30, 1904), at which time there was a marked stricture in the rectum about three inches from the anus. She has been closely under my observation ever since.

PREGNANCY WITH CANCER OF THE RECTUM.

In December, 1906, this woman became pregnant and in the following spring I noticed, first, a softening and reduplication of the scar, and later a definite mass which could be none other than a recurrence of the tumor removed two years previously. After consultation, it was decided to let the pregnancy continue, and in October, 1907, she was *delivered normally* of a *boy who is living* today. The tumor at this time was about the size of a hen's egg. Operation was advised and urged immediately thereafter, but she could not be induced to go through it until February, 1913, over *five years* after the birth of her child. In the meantime, the growth had infiltrated the floor of the vagina and the tissues in front of the sacrum. In April, 1912, Dr. O. C. Smith saw the patient in consultation with me and considered the involvement so extensive as to be inoperable. But in February, 1913, ten years after the original operation and six years after the recurrence of the growth and the birth of her child, she went to New York and was operated on by Dr. William Seaman Bainbridge. He removed the entire rectum and anus, the coccyx and all of the soft tissues in the pelvis back of the vagina, making an entirely new perineum. This woman again resumed her natural life, did her own work, took care of her family, and went out in society. The artificial anus never gave her any trouble, never soiling her clothes or interfering with any of her activities. She never had any further recurrence until *1919*, when she passed the menopause. Pain began in the region of the sacrum and in August of last year she became more or less bedridden from pain. A suspicion of return was of course immediately entertained but it could not be demonstrated with certainty until December, 1919. Dr. Bainbridge came to Hartford and again tried to stay the growth. The patient died December 22, 1919, at least *seventeen years* from the time the growth started. This case in particular has certainly served to impress on me the *very slow rate at which this disease may grow and metastasize*. There was never any reason to think that this patient had any metastasis beyond the immediate growth and this can be asserted *very positively* because at the laparotomy last December, we had plenty of opportunity to study the lymphatics in the retro-peritoneum as well as the liver.

I have seen a number of *other* cases, however, where the course of this disease *seemed* to be *quite* as rapid as is the case in malignant disease elsewhere. I have opened the abdomen several times in patients where symptoms did not go back very many weeks and found the retro-peritoneal lymphatics thoroughly invaded.

SYMPTOMS.

I have made a study of the early symptoms in the 53 cases of my series with the following results:

Pain*	28	times
Blood in stools*	27	"
Loss of weight	19	"
Obstruction to defecation	18	"
Diarrhea	11	"
Foul discharge	10	"
An obvious tumor of the rectum	8	"
Acute obstruction	6	"
Incontinence of the feces	6	"
Piles	6	"
Urinary retention	3	"
Urinary fistula	1	time
Prolapse of the rectum	1	"
Abdominal tumor	1	"
And, strange to say, Ribbon stools, only	1	"

I found evidences of syphilis or probable syphilis in the hospital records in five cases, but I believe this is of no particular value because the internes taking these histories were not looking especially for symptoms of this kind either in the individual or in the individual's family history.

In six cases, acute obstruction was the first symptom. In all of these cases, the obstruction had lasted from five to eight days. All did well after colostomy, except the one in which the obstruction had lasted eight days.

COLOSTOMY.

There may possibly be room for variable opinions as to whether a colostomy in hopeless cancer of the rectum affords sufficient relief to justify it, but there can be but one opinion as to the surgeon's course of action.

* These two were the predominating symptoms in the Hartwell series also.

If we see a man drowning, we do not consider whether that man's life if restored will be a blessing to himself and those around him. Neither do we consider the chances as to whether the venture will be successful. We throw him a rope if we can, concentrate our minds on the doing and leave the philosophy for the firelight and the pipe dream. Such is the rule of surgery.

I think there can be no doubt, however, that the colostomy in itself, not only relieves obstruction but at the same time decreases very markedly the irritation of the cancerous ulcer and removes a very considerable source of chronic poisoning for the individual by draining the cesspool of dilated colon proximal to the partial obstruction. Dr. Robert Abbe laid *great stress* on these features. The neglected cases are frequently complicated by fistulous tracts and become indurated, septic masses of tissue. These *must* be benefited by emptying the colon and so putting at rest the parts involved. Many writers say that an apparently inoperable case occasionally becomes operable as the result of colostomy.

A great many cases in this series doubtless had their lives prolonged *very materially* by this operation alone. It was done eighteen times as the only surgical measure undertaken. Only two cases made operative deaths.

A colostomy is *not* the dreadful thing we used to think it was. The patient I have previously noted, used a colostomy for sixteen years and I know it was the least of her troubles. She merely wore a belt with a single gauze sponge beneath it. She had full warning when her bowels wanted to move and never soiled her clothes.

One patient on whom I did a colostomy in 1915 wore nothing whatsoever over it and lived eight months thus. This was a permanent colostomy, the sigmoid having been cut in two and the proximal end brought up through the left rectus muscle. My note of June 2, 1916, says, "Colostomy gives absolutely no trouble. Does not even have to wear a pad over it. A retracted, red dimple with hole invisible."

I believe this is the best form of colostomy, making the opening almost as high as the navel, leaving a good loop of sigmoid, and bringing the gut straight through the middle of the left rectus muscle.

I must admit some doubt that any twist or attempt at valve formation can long remain except in the operator's fancy, but perhaps I am mistaken. I have usually drawn the gut straight through the abdominal wall in the simplest, most direct fashion. And, so far as I know, with the exception of my most recent case, who reports that he is wearing a home-made colostomy cup, none of my patients have ever wanted anything more than a gauze pad and belt.

SYPHILIS OF THE RECTUM COMBINED WITH CANCER OF THE RECTUM.

One case in which I did a permanent colostomy for what I supposed was an inoperable and hopeless cancer of the rectum, remains a conundrum and is well worth relating. This patient, No. 15 of my series, had been operated on for piles in Russia about 1897 and again in Brazil ten years later. She had had condylomata of the buttocks and rectum for many months and had been treated by various doctors in Hartford. On October 25, *1910*, she was referred to me by Dr. Standish, suspecting cancer of the rectum. She went to the hospital and I examined her under ether with the intention of obtaining a specimen for examination. To my surprise, I found it impossible to get even a finger into the rectum. The anus was a tight ring like shoe leather and appeared to be the same further up. Two days later, I made a left rectus incision. My notes read as follows: "The space asterior to the uterus is obliterated by adhesions. The left broad ligament is thick and filled with a fairly hard mass. The rectum loses itself in a mass of adhesions posterior to the uterus. These masses are hard and nodular and undoubtedly represent an inoperable cancer. Simple colostomy done through middle of left rectus. About one-fourth rotation given to the proximal end." The patient was discharged a few weeks later in good condition. I saw this patient two years later. She had had no other treatment than the colostomy above described, but she had come to me again because she had begun to lose weight and suffer pain in the back and legs. She also complained that a certain amount of discharge had recently occurred from the rectum. In December, 1913, I saw this patient again with Dr. H. F. Stoll. I could not understand why my patient had not died, and my mind was giving all the credit for the stay of the disease to the colostomy. But in view of the unexpected result, our minds naturally

turned to the possibility that the whole disease might have been due to syphilis. The fact that she had had syphilis and had had syphilis of the rectum was not disputed. I turned her over to Dr. Stoll, therefore, in December, 1913, and he treated her for syphilis then and at intervals since. This patient has been in the Hartford Hospital for various reasons and at various times, but each time the diagnosis has been cancer of the rectum.

In May, 1915, my physical examination shows her as "emaciated." The rectal examination at this time was still as before described. In another history at the hospital, a few months later, she is described as having "oedema of the feet." My notes show that she not only occasionally visited the Hartford Hospital about this time, but other hospitals, including Mt. Sinai. At any rate, she was frequently receiving anti-syphilitic treatments from Dr. Stoll, more especially about 1915, and the latter part of the year she began to feel better. Her pain disappeared, she grew stronger and began to gain in weight again.

For several years now this woman has been in excellent health. And to bring the case up to date with a fitting climax, we now learn that she was again married about four months ago.

First question: Did this woman ever have a cancer?

Second question: Did syphilis cause the cancer or did syphilis cure the cancer?

The rectum is still obstructed by a stony, hard mass. It will scarcely admit a slate pencil.

One conclusion I think may be drawn from this case. If the rectal obstruction really represents the scar tissue of syphilis, the salvarsan may have cured the syphilis but at least it had no effect on the scar tissue. Why cannot we apply this result to the problem of para-syphilitic conditions in the nervous system and judge on the basis of this case that we may cure the syphilitic infection of the brain and cord, but let us bear in mind that we cannot remove the scar tissue, which after all, is the *real pathology* of these conditions.

Because of this case that I have just described, I was extremely interested in a specimen of rectum removed by Dr. Hepburn at the hospital very recently. This specimen was simply a thick leathery tube. The walls of it were one-third or one-half an inch in thickness. It did not suggest cancer at all but appeared as a circular tube composed mostly of fibrous tissue. Its caliber was very small. There was no ulcerating surface and nothing to suggest a tumor. Dr. Hepburn and I both felt sure that the specimen represented an old, diffuse syphilitic stricture but the report *from the laboratory* was *scirrhous carcinoma.*

The sections show "a deep invasion of the connective and muscular tissues by small cuboid epithelial cells following the lymphatics. They are massed in small acini or found in long rows. The nuclei are small and pyknotic but mitoses are few. Only occasionally do these cells form gland tubules." There was no suggestion of ulceration of the rectal surfaces anywhere. Does a specimen like this represent a cancer of the rectum in process of cure by gradual fibrosis and did the case previously mentioned represent a case in which fibrosis actually went through to a cure in the ten years under which we have watched her? I do not think such a view entirely unreasonable. We know that well authenticated cases of cancer in other parts of the body *have* undergone spontaneous fibrosis and cure.

OPERABILITY AND MORTALITY.

In the series of cases under present consideration there were fourteen attempts at radical surgery; three by the sacral route *only*, made operative recoveries. One case was operated on by the *abdominal* route *only* and made a recovery. Five by the *combined* abdominal and sacral route in *two stages;* also all made operative recoveries. Five where these two routes were combined in a *single* stage operation, all died as a result of the operation. This has been the experience of most operators; that the combined operation in one stage has a very high mortality.

By comparison with the great clinics of the world, our little series of fifty-three cases is small. For the most part, it represents palliative treatment only. In eighteen cases, no operation of any sort was undertaken. Usually this meant that the patient had a sloughing mass in the pelvis without obstruction. In one or two instances, a colostomy which might have been done for relief, was refused by the patient. In four cases, an operation through the anus was done, usually for examination, relief of septic conditions, etc. In only fourteen cases was radical surgery attempted, an operability of 27%.

Cripps of St. Bartholomew's in London re-

ports an operability of 22%, even less than ours (85 out of 380; p. 387).

Lynch of New York reports operation attempted in 60% of his series; more than twice as many attempts as in ours. His operative mortality was 16%; ours was 36%. However, of the last six attempts in the Hartford Hospital only one has died, making it in late years 16.6%.

The Mayo Clinic puts their operability at 53% with a rise to 72% in the last three years. Their mortality has been 15.5%, reduced in the last three years to 12.5%.

It is manifest in all these series of cases that the operability has been increasing rapidly in very recent years and the operative mortality markedly decreasing, except for Cripps' series, in which he had but four deaths in 81 excisions—4.6%.

Wherein have we failed then? Of course in early diagnosis. That goes without saying. Some cases cannot be diagnosed early. Others, it seems, might be.

We have not employed surgery that was *daring* enough.

We have thought of cancer of the rectum as a hopeless condition. It is not. Cripps reports one proved case that lived thirty-one years after radical operation and died at the age of 84. It *can* be cured. Let us have the courage to make the attempt.

DISCUSSION OF PRECEDING PAPERS.

Dr. C. A. Porter, Boston: I think that probably we have all had one or two cases of foreign bodies that have not been reported. I have had one or two cases of pins and pinworms.

Dr. D. F. Jones, Boston: In looking up abscesses of the liver due to appendicitis, among 100 cases following appendicitis which I found, there were fourteen cases in which there was a pin in the appendix. That pins should cause abscess of the liver is quite reasonable, for they may easily perforate a vein of the portal system and cause a septic thrombosis, and thus abscess of the liver.

Dr. S. A. Mahoney, Holyoke (closing): In connection with the paper there is as complete a bibliography of foreign bodies in the appendix as I could look up. There are cited there, 81 different articles written by various men, concerning the subject. The case quoted by Dr. Smith, of Dr. Gay's, is in the Boston City Hospital Surgical Report, and I think that every case is included in the bibliography. Of course, a lot of cases have occurred that have not been reported. There have been many cases reported as foreign bodies, particularly in the early history of appendicitis, where fecal concretions had been mistaken for foreign bodies. The bibliography is, however, as complete as I could make it.

Dr. John W. Keefe, Providence: A case in point came under my observation some eight years ago. A man, about 42 years old, complained of pain and tenderness in the left iliac region. There was tenderness on pressure and rigidity, and one would have said he had trouble with his appendix, but the trouble was on the other side. So that in these cases of diverticulitis the symptoms resemble appendicitis, except that the trouble is on the other side. I opened and found diverticulitis of the sigmoid, and fecal odor, which we get in perforation of the appendix, was pronounced. We drained that wound for some five or six weeks, and finally it healed. Later on, he had another attack of pain and disturbance, and I again opened and drained, feeling it was not wise to do a resection during the acute stage. He convalesced from that, and then I advised him to have a resection done; but he said he was feeling pretty well, and he hesitated to take the risk there would be in resection. He went for some months comparatively free from trouble and then consulted me because he said he had passed some gas from the urethra, and then I found, on examination with the cystoscope, that he had an opening into the bladder, and he passed both gas and feces from time to time through the urethra. We then made an abdominal opening and resected the bowel, and it was necessary to remove so much of the sigmoid and the upper rectum that I could not unite the colon above with the portion of the rectum below, so I made an artificial anus with the proximal end of the descending colon and attached it to the wound on the left side. While removing this mass, I found that the ileum was adherent to the bladder in two places. The opening in the bladder was closed and this man ultimately made a good recovery. It is some five years ago since I operated, and I saw him recently in the city and he manages pretty comfortably with his artificial opening. We also had some x-rays made after a bismuth enema and the plate showed very nicely in his case, the bismuth in the diverticula.

Another case was that of a physician in this city who had a diverticulum of the esophagus, and an x-ray plate not only demonstrated this, but one made of the transverse colon, the descending colon, and the pelvic colon, showed as many as fifty diverticula across the transverse colon, the descending colon and the sigmoid. So these diverticula may be in other parts of the large intestine as well as in the sigmoid, though we know they occur with greater frequency in the sigmoid or pelvic colon.

In order to avoid leakage at the suture line closing the opening in the bladder, a portion of the omentum was stitched over the suture line, as is done in similar intestinal work about the pylorus.

DR. FRANK H. LAHEY, Boston: I have had a similar experience to that of Dr. Chute in a case of diverticulitis of the sigmoid which ruptured into the bladder, demonstrated by cystoscope and urethral catheter. We ligated the diverticulum at its neck, excised it and burned its stump, only to have a recurrence of the rectovesical fistula, either from the same or another diverticulum again rupturing into the bladder.

The treatment of this condition reduces itself into the treatment of diverticulitis in general, a matter which to my mind is far from satisfactory in any of its forms.

The treatment consists of colostomy and irrigation of the sigmoid from the colostomy through to the rectum, resection of the sigmoid and rectum or colostomy with complete sidetracking of the fecal current. The first procedure is of little or no value, as irrigation may temporarily relieve the inflammatory process in the sigmoid and rectum, but cannot cure it as the diverticula remain and still retain the small faecoliths which so commonly occupy these small sacs, with the result that as soon as the colostomy is closed all the elements are again present for a return of the sigmoiditis as it primarily existed.

Resection of the rectum and sigmoid is particularly hazardous in this condition, as the security of the intestinal suture lines in diverticulitis is extremely uncertain, owing to the infected condition of the bowel wall. The misfortune of resection in this condition is that when the condition is acute and one would like to resect the bowel, suture is too risky, and when sufficiently quiescent to permit of the consideration one hesitates to undertake such heroic measures. Permanent colostomy is in about the same relative position. I, personally, would prefer the lesser complications of diverticulitis, such as occasional perisigmoid abscesses or rupture of a diverticulum into the bladder, to submitting to a permanent colostomy for a condition which is in itself not essentially fatal.

DR. ARTHUR T. JONES, Providence: I would like to say regarding this paper, I feel that the question of diverticulitis is an important one, viewed, perhaps, from the standpoint of the man in the smaller community. I think that the men in the larger centers have recognized this condition of diverticulitis, but I believe that in the smaller places many of those cases have been overlooked, and it is well to keep in mind that there is such a condition and to know how to deal with that condition. Only recently I saw a specimen which was removed from a patient for alleged malignancy. A resection was done, and an end to end anastomosis, "for a large malignant mass," the operator said. The specimen was opened, and, I should think, there were probably nine or ten diverticula in it, each one containing three to four fecoliths. That patient had been operated on, and the specimen was resected as a case of malignancy, which they do simulate often. So I feel that it is important for the men in the smaller communities to keep this condition in mind; but I do not feel that to let these cases go on to continued suppuration and to possible breaking into the bladder is wise treatment. Differing from the last speaker, I should be inclined to prefer an artificial anus with that much of perfect cure rather than to be carrying around a condition of diverticulitis, with all of its probable dangers. At any rate, it is a constant menace, and we are going to get future trouble from it if that condition remains.

DR. ERNEST A. WELLS, Hartford: If there are any of you interested in cancer of the rectum who have not read the book of Harrison Cripps, I recommend it to you. He tabulates 435 cases of cancer of the rectum, all private patients. He does not include his ward cases. I know of no series to compare with his. He gives the name, the residence, the initials, pathological findings, operations and subsequent histories. It is most convincing—81 excisions and only four operative deaths. Many of these cases lived for years.

It is a very readable and delightful book.

DR. DANIEL F. JONES, Boston: The question of the speculum aroused a great deal of discussion at one of the meetings of the British Medical Association in which Sir Harrison Cripps said, "You can feel anything with your finger that you can see with the speculum." I do not doubt that a skilled man like Mr. Cripps could feel everything with his fingers that he could see with the speculum. On the other hand, the negative evidence which we get with the speculum is worth a great deal. I certainly do not think the speculum should be discarded. The finding of small flecks of blood high up is something you cannot do with your finger.

ERRATUM.

We regret that in an article written by Dr. Edwin A. Sanborn and printed in the issue of the JOURNAL for January 6, 1921, in the sentence beginning "When the insurance companies of our state collect," the word "our" is a misprint for "one." Dr. Sanborn was referring to another state, not to Massachusetts.

NEW APPOINTMENTS.

DR. JAMES C. KIRBY—Assistant in Throat Department, Massachusetts General Hospital.

DR. GEORGE H. POIRIER—Assistant in Throat Department, Massachusetts General Hospital.

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NATIONAL HEALTH COUNCIL.

A CONFERENCE of a number of the leading national voluntary health agencies was held in Washington on December 10, 1920, at which meeting a National Health Council was created, a form of organization approved, and a constitution and by-laws adopted. The membership of the Council is at present composed of nine organizations, the officers recently elected being as follows: Chairman, Dr. Livingston Farrand; Vice-Chairman, Dr. Leo K. Frankel; Recording Secretary, Dr. C. St. Clair Drake. The election of a treasurer was deferred until further consideration could be given to the whole question of financing the project.

The Council was the outgrowth of many efforts in past years to coördinate national voluntary health organizations, initiated by the American Public Health Association, the American Medical Association, and other agencies. These measures culminated in a special health coördination study carried out during the summer of 1920, under the direction of Dr. Charles J. Hatfield, Dr. Watson Rankin, and Dr. Livingston Farrand, with the financial aid of the American Red Cross. This investigation was conducted by Dr. D. B. Armstrong.

At a preliminary conference in Washington, at the call of Dr. Farrand, on October 18, 1920, the need for such a coördinating body was fully discussed, and a temporary organization perfected, Dr. Farrand acting as temporary chairman and Dr. Armstrong as temporary secretary.

The organization conference on December 10, referred to above, approved the following list of activities, as indicating the legitimate field in which the Council might function:

1. A special information bureau.
2. A legislative bureau.
3. The coördination of health activities.
4. Periodic joint conferences.
5. A statistical bureau.
6. The development of educational health material.

It is anticipated that financial resources, from the Red Cross and from other participants, will be sufficient to enable the Council to establish an office and staff, and to undertake first those activities promising the greatest benefit to member organizations.

In accordance with the bylaws adopted by the Council, each member organization has appointed one representative and one alternate. The original members, with corresponding representatives and alternates, are as follows:

American Public Health Association—Dr. Lee K. Frankel, Dr. M. P. Ravenel.
American Red Cross—Dr. Livingston Farrand, Dr. E. A. Peterson.
American Social Hygiene Association—Dr. William F. Snow, Mr. Bascom Johnson.
Council of State and Provincial Health Authorities—Dr. C. St. Clair Drake, Dr. E. R. Kelley.
Council on Health and Public Instruction of the American Medical Association—Dr. Watson Rankin, Dr. Frederick R. Green.
National Child Health Council—Dr. Philip Van Ingen, Mr. Courtnay Dinwiddie.
National Committee for Mental Hygiene—Dr. Thomas W. Salmon, Dr. George H. Kirby.
National Organization for Public Health Nursing—Miss Edna L. Foley, Miss Mary S. Gardner.
National Tuberculosis Association—Dr. Charles J. Hatfield, Dr. J. Alexander Miller.

The by-laws provided that "other national health organizations may hereafter be elected to membership by two-thirds vote of the members." Provision is also made for advisory or conferring, as well as directly participating members. The International Health Board

probably will, together with official agencies such as the U. S. Public Health Service, be associated with the Council in this capacity.

Many important matters before the Council, given partial consideration at the last conference, such as office, staff, budget resources, etc., were referred to a sub-committee made up as follows: Dr. William F. Snow, Chairman; Dr. C. St. Clair Drake, Dr. Charles J. Hatfield, Dr. Lee K. Frankel, with the council chairman, Dr. Livingston Farrand. It is expected that this committee will report its deliberations to the Council at a meeting early in January, following which the organization should be in a position to proceed with the development of its program.

The Public Health Council, representing as it does many prominent national health agencies, should serve as a valuable clearing house and coördinating center, in many fields where common functions are performed. It aims to be an integrating force among independent, autonomous agencies, rather than a merger of such agencies into one organization. It should increase the economy and effectiveness of operation, should eliminate duplication of effort, and should enhance opportunities for sympathetic and constructive public service. Such a movement, through its membership, and through a mutually helpful relationship with State and local voluntary health agencies, should effectively serve the declared object of the National Health Council, which is, "the betterment of health work in the United States."

MEDICAL NOTES.

THE AMERICAN CONGRESS ON INTERNAL MEDICINE.—The fifth annual session of the American Congress on Internal Medicine will be held at Baltimore, Md., week of February 21-26, 1921.

The activities of the Congress will be largely clinical. Ward-walks, laboratory demonstrations and group or amphitheatre clinics will be conducted daily by members of the medical faculties of the Johns Hopkins and the Maryland universities.

Further information may be secured by addressing the Secretary-General, 1002 N. Dearborn St., Chicago, Ill.

AWARD OF RED CROSS GOLD MEDAL.—At the annual meeting of the general board of the Red Cross Society in Washington on December 8, the Distinguished Service Medal in gold, the highest honor the Red Cross Society can bestow, was conferred in memory of the late Jane A. Delano, director of the department of nursing throughout the war. Miss Delano died in service in Savenay, France, in April, 1919. This is the first time this medal has been conferred, and the action was taken in recognition of the service rendered by the American nurses in war and in peace.

VACCINE FOR YELLOW FEVER.—Announcement has been made that Dr. George E. Vincent, president of the Rockefeller Foundation, has authorized the following statements regarding a vaccine for yellow fever:

The discovery of Dr. Hideyo Noguchi, at the Rockefeller Institute for Medical Research, of a vaccine for yellow fever, introduces a new factor in yellow fever control through the possibility of making persons immune to yellow fever by vaccination.

Heretofore work in yellow fever control has been entirely that of prevention of infection by controlling breeding places of the mosquito which carried the yellow fever germ. The isolation of the yellow fever organism, however, has made it possible for Dr. Noguchi to develop a serum which it is believed will reduce the mortality from yellow fever and a vaccine which gives promise of protecting the non-immunes against contracting the disease.

Already vaccination against yellow fever of people going to tropical countries is being made in New York. This work is being done at the Broad Street Hospital with vaccine furnished by the Rockefeller Institute.

The first shipment of vaccine for yellow fever from the Rockefeller Institute to tropical countries was made a year ago when three hundred bottles were sent to Mexico. Other shipments have been made since then, the latest on November 10. All vaccine supplied to Mexico is sent to the Mexican Department of Health which arranges for its distribution.

The Central American countries are so well convinced of the efficacy of Dr. Noguchi's vaccine that they are permitting travel without quarantine detention of those who have been successfully vaccinated.

RESIGNATION OF DR. JOHN B. WATSON.—Dr. John B. Watson has resigned from the profes-

sorship of psychology at the Johns Hopkins University, a position which he has held since 1908.

Chair of Tuberculosis in Wales. — The following information concerning the founding of a chair of tuberculosis in Wales has been published in a recent issue of *The British Medical Journal*:

"Major David Davies, M.P., founder of the Welsh National Memorial Association for the Prevention of Tuberculosis, has, acting with his two sisters, given the sum of £12,500 to found a chair of tuberculosis in the Welsh National Medical School, University College, Cardiff. The desire is to link up the medical work of the Memorial Association with the Welsh National Medical School, and it was therefore arranged that the professor appointed should also be medical director of the Memorial Association. Colonel S. Lyle Cummins, C.B., C.M.G., Professor of Pathology at the Royal Army Medical College, was on November 12 elected to the dual office. While serving in Egypt in 1907 he was concerned in plans for the prevention of tuberculosis among the Sudanese battalions, which suffered severely from the disease. Afterwards he was assistant professor of pathology at the Royal Army Medical College, and was engaged in superintending the manufacture of typhoid vaccine. At the outbreak of war he went to France as medical officer in charge of General Headquarters, and shortly afterwards was appointed D.A.D.M.S. In March, 1915, he was placed in charge of anti-gas defence, and during the next two years, through the combined labors of many workers, British troops were provided with appliances and a system for gas protection which was approved and imitated by other armies. Colonel Cummins then went to Italy as A.D.M.S., and in 1918 was appointed adviser in pathology at British Headquarters in France. In that capacity he came into close association with the American Red Cross Research Committee; later he was appointed a member of the General Council of the League of the Red Cross Societies. Last year he resumed his duties as Professor of Pathology, R.A.M. College, an office to which he had been appointed in 1914. We believe that this is the second chair of tuberculosis instituted in Great Britain, the other being that held by Sir Robert Philip in the University of Edinburgh."

Requirements of the Johns Hopkins Medical School.—Announcement has been made that at the Medical School of the Johns Hopkins University at least two years of college work, of which one and one-third years should be devoted to inorganic and two-thirds of a year to organic chemistry, will hereafter be required. Each year's course comprises three class-room exercises a week and five to six hours laboratory work. This represents only a minimal training, and three years' work is advised, including one-third of a year devoted to lectures and demonstrations in elementary physical chemistry. After 1923 three years' preparation in chemistry will be required, including at least 240 hours of class-room work and 500 hours of laboratory work. The former must include 60 hours in organic chemistry and a short course in physical chemistry; while the latter must include one year's work in quantitative analysis and 120 hours in organic chemistry.

Alvarenga Prize of the College of Physicians of Philadelphia.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about two hundred and fifty dollars, will be made on July 14, 1921, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published. They must be typewritten, and if written in a language other than English, should be accompanied by an English translation, and must be received by the Secretary of the College on or before May 1, 1921.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College; other essays will be returned upon application within three months after the award.

No Alvarenga Prize for 1920 was awarded.

The Rev. John Ward and Medicine.—The following address on "The Reverend John Ward and Medicine" was delivered before the Medical Society of London on May 10, by Sir D'Arcy

Power, K.B.E., and was printed in *The British Medical Journal* under the title, "The Pepy's of Medicine."

Ward, who was vicar of Stratford-on-Avon in the reign of Charles II, was versatile and curious, and loved experiment. While in London he had attended the lectures of Sir Charles Scarborough at the Barber-Surgeons' Hall, had visited the hospitals of St. Thomas and St. Bartholomew, and had made inquiries about the cost of foreign medical degrees. He treated gratuitously his parishioners of the humbler ranks, although there was an apothecary and at least one physician in Stratford during his incumbency. From time to time he did a little minor surgery, and he followed the surgical aphorism, "Allways lay a wound open, whether it bee fresh or ulcerated." He seemed to have some idea of the metastasis of cancer, for he spoke of glandules arising in other parts among people who thus suffered. On pleurisy and effusion he wrote: "When an incision is to be made into ye breast open it betwixt ye 3rd and 4th ribb reckoning upwards, yt is just above ye diaphragm, and to yt perhaps apply a Caustick wch is very strong and will eat through ye muscle; yn make an Incision and keep itt open with Tents."

Among the epidemics from which Stratford people suffered during Ward's incumbency were small-pox, measles and plague. The difficulty of distinguishing between small-pox and chicken-pox did not escape him. On plague, he made several observations—one that "itt was observed yt fat people catch itt sooner but lean people died 2 for 1." Some interesting facts about Greatrakes, the "stroker," or faith healer, as he would be called today, were given in Ward's diaries. This man tried his cure on Lady Anne Conway, without success in her case, though he relieved many persons in the neighborhood, so that Dr. Stubbs, the physician at Stratford, wrote a volume in favor of his cure.

From the details given by Ward of the illnesses of his neighbors and parishioners, it was sometimes possible to make a diagnosis, as, for instance, in the case of Dr. Gordon, Bishop of Exeter, and later of Worcester, who died of a stoppage of the urine which was supposed to be stone, but no stone appeared, only "two pieces of flesh growing one against another in ye neck of the bladder yt ye urine could not pass"—doubtless a case of enlarged prostate. Ward occasionally made an effort to generalize from the particular; thus he said: "Whether a great desire to live which some persons manifest uppon their sick beds, as also a willingness to take anything wch before they refused is not a sign they are tending to their long home." In Ward's own opinion, and probably that of his neighbors as well, he was very skillful in urinoscopy, and made many entries on that subject. He distinguished clearly between syphilis and gonorrhea, which were rife at Stratford during his incumbency. Death did not end the interest which Ward took in the bodies of his parishioners. He gave many details of embalming.

Perhaps the most interesting observations in Ward's notebooks were his references to Willis, Lower, Robert Boyle, and others of his contemporaries, who were personally known to him as graduates of Oxford. Lower's classical experiments on transfusion, suggested by Christopher Wren's injection of various drugs into veins were recorded by Ward. Of Sydenham, Ward wrote: "Dr. Sydenham advises a vomit two hours after a gentle dinner; after vomiting hee gives a narcotick potion or Bolus to allay ye tumult yt ye vomit hath made." Other entries related to Sir Charles Scarborough, Sir Francis Prujean, and Sir Alexander Frazier, of whom "the King hath a high opinion . . . and says all ye physicians are fools to him." The properties of opium, laudanum, and antimony were the subject of much inquiry at this time, and Ward made several allusions to these drugs. "Starkey told me that ye sleeping properties of opium may bee separated so as to make itt a hinderer of sleep, but ye sudorific and anodyne qualities cannot."

His observations showed Ward to be a man of great versatility at a time when the prevailing type of mind was versatile. In many respects he was a true disciple of Boyle. He would have made a good practitioner had he given himself entirely to medicine, and he would have advanced the science of physiology. Boyle interested him in the new chemistry, and his restless curiosity led him into metallurgy and the more dangerous quest of the philosopher's stone. But with all this he was a dilettante, spoiled, probably, by the possession of a competency, hampered perhaps by ill health, for he was certainly ruptured, and died at the age of 52, probably of phthisis.

BOSTON AND MASSACHUSETTS.

WEEK'S DEATH REPORT IN BOSTON—During the week ending January 22, 1921, the number of deaths reported was 219 against 253 last year, with a rate of 15.08 against 16.32 last year. There were 27 deaths under one year of age against 48 last year.

The number of principal reportable diseases were: Diphtheria, 104; scarlet fever, 42; measles, 62; whooping cough, 27; typhoid fever, 1; tuberculosis, 35.

Included in the above were the following cases of non-residents: Diphtheria, 5; scarlet fever, 4; tuberculosis, 5.

Total deaths from these diseases were: Scarlet fever, 1; measles, 1; whooping cough, 1; tuberculosis, 8.

Obituary.

WILLIAM ELBRIDGE BOARDMAN, M.D.

Dr. William Elbridge Boardman died at his home in Boston, January 11, 1921, aged 76 years. Dr. Boardman was born in Boston April 27, 1844. After graduating from Harvard College in 1865, he entered Harvard Medical School, taking an M.D. in 1868, previously serving as house surgeon at the Boston City Hospital. He was connected with the Gynecological Departments of the Carney and City hospitals, was a member of the Obstetrical Society of Boston, the Massachusetts Medical Society and American Medical Association. He had practised up to a short time before his death.

He is survived by his widow, two daughters, two sons, one of them Dr. William Parsons Boardman, who had an office with his father.

Miscellany.

RESOLUTIONS ADOPTED UPON THE DEATH OF DR. SAMUEL J. MELTZER.

At a special meeting of the Council for the New York Society for Thoracic Surgery, the following resolutions were adopted upon the death of Dr. Samuel J. Meltzer:

Whereas, on November 7th, 1920, death removed from the roll of this Society our distinguished colleague, Dr. Samuel J. Meltzer; and

Whereas, during his membership in this young Association, Dr. Meltzer has been an active worker and an ardent and enthusiastic supporter of the objects which called the Society into being; and

Whereas, by his formal communications as well as by his illuminating discussions, in fact by his mere presence, he has been a continuous source of inspiration to its members; and

Whereas, his important discovery of overcoming the dangers of acute operative collapse of the lung by means of his world-renowned "Intratracheal Insufflation" is an epoch-making contribution to thoracic surgery, and

Whereas, Dr. Meltzer was honored with the office of "First President of the American Association for Thoracic Surgery," the offspring of this Society; therefore, be it

Resolved, that in the death of our colleague, the New York Society for Thoracic Surgery has lost one of its most valued and beloved fellows; and be it further

Resolved, that these resolutions be spread upon the records of this Society and a copy be forwarded to his bereaved family and to the medical journals.

Howard Lilienthal, M.D.
Willy Meyer, M.D.
William H. Luckett, M.D.
Carl Eggers, M.D., *Sec'y.*

Correspondence.

DR. EARLE'S ESSAY ON THE SURGEON.

31 Massachusetts Avenue, Boston,
January 15, 1921.

Mr. Editor:—

Dr. Earle's essay on the surgeon (Microcosmography, London, 1628) is full of interest in connection with a previous communication, "A Meer Dull Physician." It would seem as if the honors were fairly even between the two.

A Surgeon.

"Is one that has some business about this building or little house of man, whereof nature is as it were the tiler, and he the plaisterer. It is oftener out of reparations than an old parsonage, and then he is set to work to patch it again. He deals most with broken commodities, as a broken head or a mangled face, and his gains are very ill got, for he lives by the hurts of the commonwealth. He differs from a physician as a sore does from a disease, or the sick from those that are not whole, the one distempers you within, the other blisters you without.

"He complains of the decay of valour in these days, and sighs for the slashing age of sword and buckler, and thinks the law against duels was made meerly to wound his vocation. He had been long since undone if the charity of the stews had not relieved him, from whom he has his tribute as duly as the pope; or a wind-fall sometimes from a tavern, if a quart pot hit right. The rareness of his custom makes him pitiless when it comes, and he holds a patient longer than our (spiritual) courts a cause.

"He tells you what danger you had been in if he had staid but a minute longer, and though it be but a pricked finger, he makes of it much matter. He is a reasonably cleanly man, considering the scabs he has to deal with, and your finest ladies are now and then beholden to him for their best dressings. He curses old gentlewomen and their charity that makes his trade their alms, but his envy is never stirred so much as when gentlemen go over to fight on Calais

sands,* whom he wishes drowned e'er they come there, rather than the French shall get his custom."

Very truly yours,

WILLIAM PEARCE COUES, M.D.

* Note from the text:

"Calais sanda were chosen by English duellists to decide their quarrels on, as being out of the jurisdiction of the law. This custom is noticed in an epigram written about the period in which this book first appeared:

"'When boasting Bembus challeng'd is to fight,
He seems at first a very Diuell in sight;
Till more advizde, will not defile (his) hands,
Unless you meet him upon *Callice sands.*'"

"IN RE: SURGERY VERSUS CANCER."

Boston, January 12, 1921.

Mr. Editor:—

The letter on this subject by Dr. S. W. Little, published in the JOURNAL of December 23, is so well written and plausible that it appears to deserve an answer. It might, in fact, easily deceive those who have not given special attention to its subject, since they would easily recognize its essential truth in some particulars and fail to recognize that after a very convincing statement of these proofs it goes on to conclusions which are based, not upon them, but upon entirely unwarranted assumptions.

It is always easy to prove the obvious, and Dr. Little begins by offering an excellently worded and quite conclusive statistical argument in favor of the universally admitted facts that the cancer death rate is increasing and that its small fluctuations from year to year over the area of the United States are no more than accidental. He not only begins with these easily demonstrated proofs, but, no doubt innocently, constantly confuses the remainder of his letter by reiterative references to these facts in a manner which might lead those not familiar with the subject to conclude that they had some bearing upon the other statements which he makes.

If we analyze the remainder of his letter, it consists of a statement, which he constantly repeats in varying forms, to the effect that these statistics show that the conversion of the public and the profession to early operating has failed to check the increase of cancer. This is accompanied by implications that those in "authority," *i. e.*, those who have especially studied the subject, claim to the contrary. On these two points it seems to me that Dr. Little's assumptions are entirely unwarranted.

On the first point Dr. Little is definitely mistaken in his facts. In spite of the campaign of education which has been waged for a number of years, early operating is still, unfortunately, not the fact but the exception. The latest statistical analyses show that, on the average, cases still come to operation more than a year after the growth was first noticed and in many parts of the country the facts are far worse than this. Early operating is, as yet, so much the exception that it could not possibly have affected the general statistics.

On the second point, that experts claim it has so affected the death rate, Dr. Little's implications (he cautiously avoids direct statements) fail in accuracy. The general statistics of the country are so clearly unaffected that no one with any knowledge of the subject could possibly make such a claim. The campaign of education to which the American Society for the Control of Cancer and many public-spirited individuals in the profession have been for some years devoting themselves is now fairly well organized for prosecution over the country as a whole, but the inertia of conservatism is tremendous and, with all the work that has been done, it has so far been put into operation only in a few selected localities. Certain statisticians, notably Hoffman, have recently claimed analyses of *local* statistics hint that early operation has become more common and that the *local* death rate has improved in a few communities in which the campaign has been most active and longest continued, but these men themselves have stated that even these local decreases are suggestive rather than evidential. No one has claimed a *general* improvement over the country as a whole. Dr. Little states most truly that the whole voice of professional authority is committed to the belief that early operations, and especially the removal of pre-cancerous lesions, will, when generally adopted, decrease the general cancer death rate. Probably all of those who have consistently adopted this principle believe that it has already decreased this death rate in their own practice. From the nature of the disease statistical proof of the effects of early operating cannot be published till at least five years after the operation has been performed. From the nature of the case, such statistical proof in convincing mass has not, and cannot, yet be published, but Dr. Little perhaps forgets that the pronouncement of authority, of our masters, the leaders of the profession, has not been founded on theory, but on the results of their personal experience. To most of us such a consensus of opinion among our leaders as at present obtains must carry weight even while we wait for the definite statistical proof which they promise us. Dr. Little's statement to the contrary is, when analyzed, apparently a statement of his individual opinion.

I feel, Mr. Editor, that I must apologise for so lengthy a communication, but well written arguments upon unwarranted assumptions are sometimes capable of doing a great amount of harm.

EDWARD REYNOLDS, M.D.

RECENT DEATHS.

DR. ELLIOTT DANIEL ROBBINS, a Fellow of the Massachusetts Medical Society, and a graduate of Harvard Medical School, died at Boston, December 13, 1920, aged 64.

DR. LESLIE H. HENDEE died of heart disease at the age of fifty-six, on December 31, 1920, at Pittsfield, Massachusetts. Dr. Hendee was born in Lowville, N. Y. He was a graduate of the Baltimore Medical College in 1894, and began practising in Westfield. In 1905 he went to Pittsfield, where he organized the Emergency Hospital. Dr. Hendee was physician for tht Scottish Clans, Eagles, and Italian Societies, and was at one time president of the Pittsfield aerie of Eagles and Hampden County Medical Society. Dr. Hendee is survived by his widow and one daughter.

DR. BENJAMIN SEAVER BLANCHARD died at his home in Brookline, January 14, 1921, after a short illness from acute rheumatism. He was born in Roxbury, September 22, 1856, the son of William and Mary Elizabeth (Seaver) Blanchard, and was the grandson of Benjamin Seaver, who in the early fifties served two terms as mayor of Boston. He fitted for college at the Roxbury Latin School and was a graduate of Harvard with the class of 1879 and of the Harvard Medical School, 1882. While in college, Dr. Blanchard was prominent in sports and played halfback on the football team in the late seventies.

Following his course and graduation at the Medical School, he began practice and almost immediately took up his residence in Brookline where his active career in the profession had been passed and where he was widely known. He was a member of the Massachusetts Medical Society, The Country Club, Varsity Club, Unitarian Club and the Cohasset Golf Club and always kept up his interest in sports.

On November 30, 1887, he married Miss Clara Fessenden Barnes of Boston, by whom he is survived, together with three sons and a daughter.

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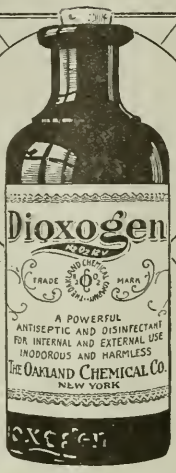

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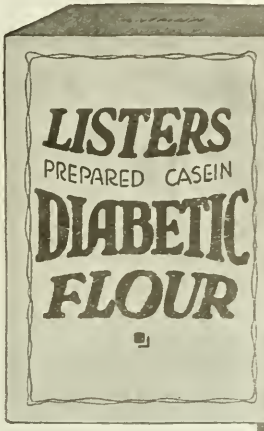

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